

# Comparisons of Job Characteristics

**Focus Occupation:** [Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders \(51-4122\)](#)

**Associated Occupation:** [Engine and Other Machine Assemblers \(51-2031\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 90

**Focus Occupation:** Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)

**Associated Occupation:** Engine and Other Machine Assemblers (51-2031)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Mechanical	6.8	14.7	12.2	< Expanded education and/or training may be required
Production and Processing	6.0	8.8	11.6	>> Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 81

**Focus Occupation:** Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)

**Associated Occupation:** Engine and Other Machine Assemblers (51-2031)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Operation Monitoring	6.6	10.3	9.6	0 Current skill level may be sufficient
Quality Control Analysis	5.9	10.1	6.0	<< Extensive development of skills in this area may be required
Repairing	3.4	8.1	4.8	<< Extensive development of skills in this area may be required
Troubleshooting	4.5	8.0	5.7	<< Extensive development of skills in this area may be required
Equipment Maintenance	3.5	7.9	5.0	<< Extensive development of skills in this area may be required
Equipment Selection	3.3	5.5	4.6	< A higher skill level may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 94			
Focus Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122) Associated Occupation: Engine and Other Machine Assemblers (51-2031)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Arm-Hand Steadiness	6.8	11.1	8.1	<<	Extensive improvement in abilities may be required
Visualization	7.5	10.7	7.7	<<	Extensive improvement in abilities may be required
Finger Dexterity	7.6	10.6	9.6	<	Some improvement in abilities may be required
Manual Dexterity	6.5	10.3	9.7	0	Current ability level may be sufficient
Control Precision	6.6	10.1	9.6	0	Current ability level may be sufficient
Multilimb Coordination	6.0	10.0	7.6	<<	Extensive improvement in abilities may be required
Extent Flexibility	4.8	9.6	7.9	<	Some improvement in abilities may be required
Trunk Strength	5.7	9.6	7.0	<<	Extensive improvement in abilities may be required
Reaction Time	4.8	9.1	7.3	<	Some improvement in abilities may be required
Hearing Sensitivity	5.6	8.5	6.0	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 73
<b>Focus Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)</b> <b>Associated Occupation: Engine and Other Machine Assemblers (51-2031)</b>		
Work Activities	Exclusivity of Activity	
Examine products or work to verify conformance to specifications	15	
Fabricate, assemble, or disassemble manufactured products by hand	11	
Install equipment or attachments on machinery or related structures	48	
Lay out machining, welding or precision assembly projects	63	
Move or fit heavy objects	8	
Operate hoist, winch, or hydraulic boom	34	
Read blueprints	10	
Read specifications	23	
Read technical drawings	7	

Read work order, instructions, formulas, or processing charts	9
Understand technical operating, service or repair manuals	6
Use acetylene welding/cutting torch	54
Use hand or power tools	2
Use precision measuring tools or equipment	17
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 67

**Focus Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)**  
**Associated Occupation: Engine and Other Machine Assemblers (51-2031)**

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Data management and query software	1
Forming tools	2
Holding and clamping tools	3
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Power tools	2
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.